

## Patent Abstracts of Japan

PUBLICATION NUMBER : 05258622  
PUBLICATION DATE : 08-10-93

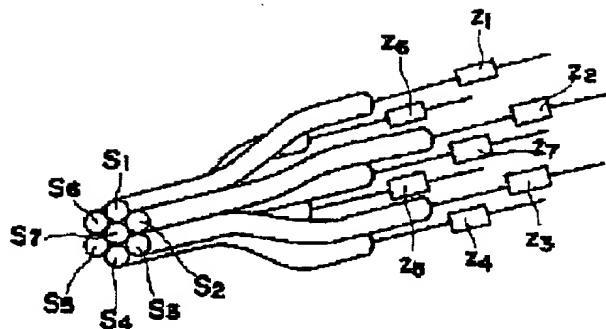
APPLICATION DATE : 09-03-92  
APPLICATION NUMBER : 04085056

APPLICANT : CENTRAL RES INST OF ELECTRIC  
POWER IND;

INVENTOR : TSUKAMOTO OSAMI;

INT.CL : H01B 12/08 H01F 5/08

TITLE : SUPERCONDUCTIVE STRANDED  
WIRE, SUPERCONDUCTIVE CABLE,  
AND POWER MACHINERY WINDING  
USING THEM



ABSTRACT : PURPOSE: To equalize the critical current flowing through respective strands of a superconductive stranded wire or a superconductive cable or each subcable so as to enhance the critical current.

CONSTITUTION: Impedances  $Z_1$  to  $Z_7$  as current controlling means are added to respective strands  $S_1$  to  $S_7$  of a superconductive stranded wire  $S$  or a superconducting cable or each subcable, or twisting of respective strands or subcables are locally widened so as to enlarge distances between them resulting in the reduction in mutual inductances between respective strands or subcables, in order to equalize the current flowing in respective strands  $S_1$  to  $S_7$  or subcables so as to eliminate degradation. Further, these superconductive stranded wires or superconductive cables are used for windings in power machinery, for example a coil in a transformer.

COPYRIGHT: (C) JPO